

IN THE CLAIMS:

Please cancel Claims 14, 15, 20 and 23, and incorporate the substance of allowable Claim 23 into Claim 1, as indicated below. Please cancel Claims 10, 11 and 27 to 40 without prejudice or disclaimer of subject matter. Please amend the remaining claims as follows:

1. (Currently Amended) An ink supply system comprising:

a first ink storage area to store ink having a first ink container to store ink,
negative pressure generating means to generate negative pressure in the first ink container,
and connecting means through which the ink is supplied; and

a second ink storage area connected to the first ink storage area through a connecting said connecting means to introduce the ink from the first ink storage area for supply to a print head; and

a means which, when the connecting means disconnects a connecting portion on the second ink storage area side from a connecting portion on the first ink storage area side, hermetically closes the connecting portion on the first ink storage area side;

wherein the connecting means disconnectably connects the second ink storage area to the first ink storage area and, when the two ink storage areas are connected, forms a plurality of communication paths communicating the two ink storage areas with each other;

wherein the second ink storage area, excluding the plurality of communication paths and a connecting portion with the print head, virtually forms a hermetically closed space;

wherein, when the ink is refilled into the second ink storage area from the first ink storage area through at least one of the plurality of communication paths, a gas present in the second ink storage area can be transferred to the first ink storage area through at least one other communication path;

wherein the first ink storage area has a space to take in the gas transferred from the second ink storage area

wherein at least a part of the first ink storage area is situated higher in the gravity direction than the connecting means;

wherein the first ink container is provided with a gas accommodating chamber which is installed higher than the connecting means and accommodates a gas transferred from the second ink storage area; and

wherein said first ink storage area further comprises means to reduce an internal volume of the accommodating chamber.

2. (Currently Amended) An ink supply system as claimed in claim 1, wherein the first ink storage area has a means to introduce an atmosphere into the first ink storage area, without passing it the atmosphere through the second ink storage area.

3. (Original) An ink supply system as claimed in claim 1, wherein the plurality of communication paths have their openings on the first ink storage area side situated higher in a gravity direction than their openings on the second ink storage area side and also have an opening of the at least one communication path on the second ink storage area side situated higher in the gravity direction than an opening of the at least one other communication path on the second ink storage area side.

4. (Currently Amended) An ink supply system as claimed in claim 1, wherein, based on a relationship between a pressure that the ink in the first ink storage area applies to the hermetically closed space of the second ink storage area, which is a virtually hermetically closed space; and a force of an ink meniscus formed in the at least one of the plurality of communication paths, a gas present in the second ink storage area is transferred into the first ink storage area through the at least one communication path while at the same time the ink is supplied from the first ink storage area into the second ink storage area through the at least one other communication path.

5. (Original) An ink supply system as claimed in claim 1, wherein the opening, on the second ink storage area side, of the at least one of the plurality of communication paths is formed in contact with an inner wall of a container forming the second ink storage area.

6. (Original) An ink supply system as claimed in claim 1, wherein the opening, on the second ink storage area side, of the at least one of the plurality of communication paths is formed with a groove that extends along the communication path toward the inside of the second ink storage area.

7. (Original) An ink supply system as claimed in claim 1, wherein the opening, on the second ink storage area side, of the at least one of the plurality of communication paths is in contact at all times with the ink in the second ink storage area.

8. (Original) An ink supply system as claimed in claim 1, wherein the plurality of communication paths have different contact angles between the inner wall thereof and the ink.

9. (Original) An ink supply system as claimed in claim 1, wherein the plurality of communication paths have different inner diameters.

10. and 11. (Cancelled)

12. (Currently Amended) An ink supply system as claimed in claim 11 claim 1, wherein the second ink container is formed deformable.

13. (Currently Amended) An ink supply system as claimed in ~~claim 11~~
claim 1, wherein the second ink container has a negative pressure generation means to
generate a negative pressure therein.

14. and 15. (Cancelled)

16. (Currently Amended) An ink supply system as claimed in ~~claim 15~~
claim 1, wherein the first ink container has:

a movable member in at least a part thereof that defines an ink storage space
and which, as the ink is supplied into the second ink storage area, can be displaced in a
direction that reduces the ink storage space, and a negative pressure generation means to
generate negative pressure in the ink storage space.

17. (Original) An ink supply system as claimed in claim 16, wherein the
first ink container has a member that urges the movable member in a direction opposite the
direction in which the movable member can be displaced.

18. (Currently Amended) An ink supply system as claimed in ~~claim 15~~
claim 1, wherein the first ink container has an atmosphere introducing means to introduce
external air into the ink storage space from outside as the ink is supplied from the ink
storage space into the second ink storage area.

19. (Currently Amended) An ink supply system as claimed in claim 15 claim 1, wherein the first ink container can be replaced after the ink therein is consumed.

20. (Cancelled)

21. (Currently Amended) An ink supply system as claimed in claim 20 claim 1, wherein the gas accommodating chamber is deformable.

22. (Original) An ink supply system as claimed in claim 21, wherein the gas accommodating chamber has a maximum internal volume which is larger than an internal volume of an ink path, the ink path introducing the ink from the first ink container to the connecting means.

23. (Cancelled)

24. (Currently Amended) An ink supply system as claimed in claim 23 claim 1, wherein the means to reduce the internal volume of the gas accommodating chamber is a means to press the gas accommodating chamber.

25. (Currently Amended) An ink jet printing apparatus for printing an image on a print medium by using an ink jet print head, the printing apparatus having an

ink supply system defined in any one of claims ~~1 to 24~~ 1 to 9, 12, 13, 16 to 19, or 21 to 24 as a system to supply ink to the ink jet print head.

26. (Original) An ink jet printing apparatus as claimed in claim 25, further comprising:

a means to move the print head in a main scan direction; and

a transport means to transport the print medium in a subscan direction crossing the main scan direction;

wherein the first ink storage area is installed at a predetermined position in a body of the printing apparatus;

wherein the second ink storage area is installed movable with the print head;

wherein the connecting means, when the print head moves to a predetermined position in the main scan direction, connects the second ink storage area to the first ink storage area and, when the print head moves away from the predetermined position, disconnects the second ink storage area from the first ink storage area.

27. to 40. (Cancelled)